# Quick Install For The D/21D and D/41D Boards

Part number 05-0306-002
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## INSTALLATION PROCEDURE

**I. Configuring the hardware***

* You can install the hardware and software in any order, but Dialogic recommends that you install the hardware first when running in a MS-DOS and OS/2 environment, and software first when running in a Windows NT or UNIX environment.

**II. Installing the hardware**

**III. After installing the hardware**

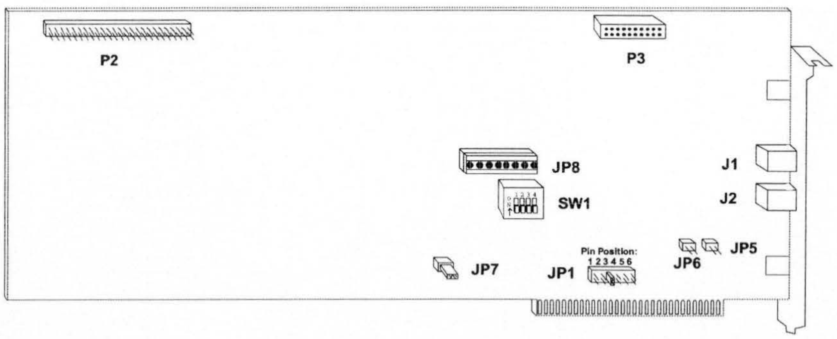
## Electrostatic Discharge

**CAUTION**
All computer boards are electrostatic-sensitive. Handle all static-sensitive components, boards, and systems at a static-safeguarded work area.

A static-safe workstation consists of a grounded static-dissipative wrist strap and a work surface covered with or composed of a grounded static-dissipative material. The work surface drains electrical charges from conductive materials when the materials are placed on the surface. The grounded static-dissipative wrist strap drains static charge from a person wearing the strap. Both components ensure that static charges are drained at a rate and current level that are safe. Both must be used any time a person is handling any component. See *II. Installing the Hardware* for a picture of a static-safe work station.

1. Ground yourself to the static-safe work station using a static-dissipative wrist strap for the entire installation.
2. Remove the board from the shipping carton and static shielding at the static-safe workstation.
3. Lay the board on the static-dissipative work surface.

## Physical Description



| Part | Function |
|---|---|
| J1-J2 | • Connectors for interface with PBX or CO lines |
| JP1 | • Jumper pins to set IRQ level |
| JP5-JP6 | • Jumper pins to set base memory segment |
| JP7 | • Jumper pins to enable multiple D/4x boards in a system |
| JP8 | • Jumper pins to select the built-in loop start interface or an external interface (i.e., DTI/124 T-1 card) |
| P2 | • Microprocessor interface |
| P3 | • Connector for Analog Expansion Bus (AEB) |
| SW1 | • Switch to set the offset address and default hook switch state |

## I. CONFIGURING THE HARDWARE

### Configuring Multiple Voice Boards (JP7)

You can install up to 16 D/21D or D/41D boards in your system. Set JP7 based on the number of boards in your system:

- 1 board: Leave the jumper installed on JP7 (default).
- Multiple boards: Remove the jumper on JP7 from all **but one** D/21D or D/41D board in the system.

### Setting the Default Hook Switch State (SW1:4)

Configure SW1 switch 4 to change the Default Hook Switch State for a board when the PC is powered on but the firmware has not yet been downloaded. Use the off-hook line state to produce a busy signal rather than a ringing with no answer if the board receives a call before the firmware has been downloaded to the board.

It is not necessary to set all of the D/21D and D/41D boards in the system to the same default hook switch state.

| Hook Switch State | SW1:4 | Board's Response to an Incoming Call When Not in Use |
|---|---|---|
| "on-hook" | off | Ringing, no answer (default) |
| "off-hook" | on | Busy |

The board produces a ringing, no answer if no power is applied to the PC.

### Setting the Base Memory Address Segment (JP5 & JP6)

The default base memory address segment for the D/21D and D/41D boards is D0000H. You can change either board to the A0000H, B0000H, or C0000H segment. Generally, there is no need to change unless you have more than eight D/21D or D/41D boards in your system or if other non-Dialogic devices in your system must use the D0000H segment. Select the segment with jumpers JP5 and JP6:

| JP5 | JP6 | Base Address |
|---|---|---|
| out | out | D0000H (default) |
| in | out | A0000H* |
| out | in | C0000H |
| in | in | B0000H* |

* Video adapters often use these segments. Be aware of possible conflicts.

### Setting the Interrupt Level (JP1)

The default hardware interrupt (IRQ) level is 3. If you want to change the IRQ level, move the jumper on jumper block JP1 as shown below:

| Pin Pos. | IRQ |
|---|---|
| 1 | 2/9 |
| 2 | 3 (default) |
| 3 | 4 |
| 4 | 5 |
| 5 | 6 |
| 6 | 7 |

- Set every D/21D and D/41D board in the system to the same IRQ level.

### Configuring the Offset Address (SW1: 1,2,3)

The default offset address for the D/21D and D/41D boards is 0000H. Each board in your system requires a unique address, so you must change the offset address on every additional D/21D and D/41D board. If you need to change an address, set the switches 1, 2, & 3 on SW1 as indicated below:

| SW1: | 1 | 2 | 3 | Offset (hex) |
|---|---|---|---|---|
| | off | off | off | 0000 |
| | off | off | on | 2000 |
| | off | on | off | 4000 |
| | off | on | on | 6000 |
| | on | off | off | 8000 |
| | on | off | on | A000 |
| | on | on | off | C000 |
| | on | on | on | E000 |

- While you can map only one D/21D or D/41D board to an offset, you can set multiple D/21D and D/41D boards to consecutive offsets within a segment. The board with the lowest address is board number 1 (channels 1-2 or 1-4), the next address, board number 2 (channels 3-4 or 5-8), etc.
- Make sure that the settings you specify in the configuration file(s) match the physical settings on the board.

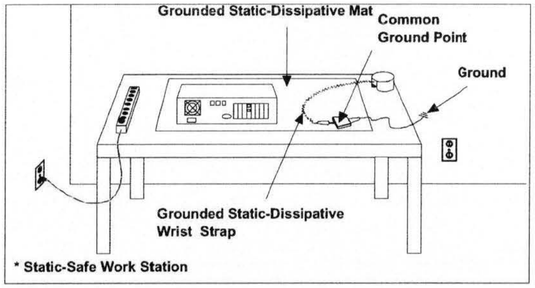
### Configuring the Line Source (JP8)

The D/21D and D/41D boards can send and receive audio signals through a built-in loop start interface or an external interface via the AEB. Select the line source with JP8:

| JP8 | Source |
|---|---|
| in | RJ-14 (loop start, default) |
| out | P3 (AEB connector) |

## II. INSTALLING THE HARDWARE

1. Prepare a static-safe work station, turn off all power to the system, and disconnect all of the system's power cords from electrical outlets.

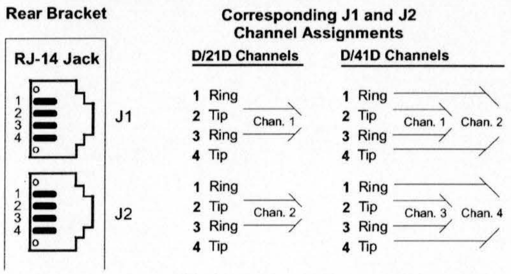

Grounded Static-Dissipative Mat
Common Ground Point
Ground
Grounded Static-Dissipative Wrist Strap

* Static-Safe Work Station

2. Remove the PC cover, select an empty 8-bit slot, and remove the slot's retaining screw and access coverplate.
3. Use the expansion slot's board guides as you insert the board's edge connector into the expansion slot.
4. Replace and tighten the retaining screw to secure the board.

Select a new slot and repeat steps 3-4 for each board you are installing in the system. Use the AEB cable to connect the D/21D and the D/41D boards with the other boards in the system. Reinstall the PC cover when finished.

### Connecting To Telephone Lines



- Connect one end of a terminated cable into the RJ-14 jack on the board and the other end into your wall jack. Use one terminated cable for each jack (2 channels). Check your wall jack. Most wall jacks are RJ-11 jacks and not RJ-14 jacks.
- If using an RJ-11 connector, you can access only one channel per jack: Channel 1 of Jack 1 and Channel 3 of Jack 2.
- A standard telephone will not function when directly attached to a D/41D board jack.

## III. AFTER INSTALLING THE HARDWARE

- Test the boards using D40CHK. See the *Voice Hardware Diagnostic Guide* for more information.
- Install the D/21D and D/41D System Software as described in the *System Release Software Installation Guide for <os>.*
- Refer to the *Dialogic Products and Services Guide* for board specification information.

The D/21D and D/41D boards come with a 3 year warranty. See the *Warranty Card* for details.

## THE RETURN MATERIAL AUTHORIZATION (RMA) PROCESS

If you suspect you have a defective board, you can return the board to Dialogic for servicing. The following section outlines the Return Material Authorization (RMA) Process procedure.

- ☐ Check to see if the problem is due to a mistake or oversight in the installation process.
- ☐ Call Dialogic Technical Support to confirm that the board is defective at 1-201-993-1443.
- ☐ Call Dialogic's RMA coordinator at (201) 993-3000 x6374. Telephone lines are open from 9 a.m. to 5:30 p.m. EST. Give the board's serial number (begins with two letters and is located on a label attached to the board) and a brief description of the problem to the coordinator. The RMA coordinator will give you an RMA number and an estimated return date.
- ☐ While observing correct static-handling procedures, disconnect power, communications cables, and telephone, and remove the board from the PC chassis.
- ☐ Repack the board, observing correct static-handling procedures. Place the board in an anti-static bag and then put it in a shipping carton using appropriate packing material. Use the original shipping materials if possible. Include diagnostic printouts when applicable.
- ☐ Write the RMA number on the outside of the box you are shipping (for example, RMA #2201) and send the package to the attention of the assigned RMA number.
- ☐ Ship the board to Dialogic at the following address. Dialogic is not responsible for risk of loss or damage in transit.

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  Parsippany, New Jersey 07054, USA